

**HUNTERS POINT NAVAL SHIPYARD
BASE REALIGNMENT AND CLOSURE CLEANUP TEAM
MEETING NOTES
April 24, 2014**

These notes summarize the meeting of the Navy Base Realignment and Closure (BRAC) Cleanup Team (BCT) for Hunters Point Naval Shipyard (HPNS). The meeting was held at 9:00 a.m. on April 24, 2014 at CH2M HILL's office in Oakland, California.

I. Introductions, Meeting Guidelines, Agenda Review, and Meeting Minutes

Melanie Kito (Navy) began with introductions; participants are listed on the last page of this summary. The action items from March were completed. Ms. Kito announced that the HPNS team won two internal Navy awards for the environmental work on HPNS. Hamide Kayaci is returning to the HPNS team and will replace Chris Yantos as Remedial Project Manager (RPM) for the HPNS radiological program. Mr. Nathan King will be the new San Francisco Bay Regional Water Quality Control Board project manager for HPNS and will work with Ms. Tina Low.

II. Radiological Program Update (Catherine Haran, Navy)

- The Parcel C Phase II project includes construction of the storm drain system along Lockwood Street that is expected to be completed in May 2014. The Navy has excavated 29 trench units, of which 20 have been backfilled and restored, 7 are currently being backfilled and restored, and 2 are radiologically cleared but not yet backfilled.
 - Surveys are complete for soil Survey Units 1, 2, 3, 5, 6, 7, 8, and 9 and the Navy is awaiting definitive gamma data for Survey Unit 4.
- At Building 253 in Parcel C, all of the ventilation system is removed and surveyed. At Building 211, 100 percent of the wooden extension is surveyed and screened. At both buildings, floors are still being surveyed.
- In Parcel D-1, the Navy is awaiting a California Department of Public Health unrestricted radiological release letter for the Gun Mole Pier. Field work will resume on May 12, 2014 and includes the Ship Berth 14 survey, disposal of wooden rail ties, backfill of the sanitary and storm drain systems, and deconstruction and removal of Radiological Screening Yard (RSY)-2.
- In Parcel E, the Navy has completed removal of the 7,600 linear feet of sanitary and storm drain system removals.

III. Parcel F Update (Danielle Janda, Navy)

- The purpose and scope of the Parcel F Radiological Feasibility Study (FS) Addendum includes determining if no further action for Parcel F radionuclides of concern (ROC) is appropriate and providing sufficient information to determine whether radiological controls will be required.

- The FS Addendum will present available site data for ROC, quantify cumulative risks posed by ROC and non-radiological chemicals, and present a No Action FS.
- In addition to the FS Addendum, the Navy will also be conducting a Carbon Amendment Pilot Study in the South Basin area of Parcel F. The primary objectives of the pilot study include evaluating the effectiveness of the carbon amendments for treatment of polychlorinated biphenyl (PCB)-contaminated sediments; the physical stability of the carbon amendments in the subtidal and intertidal environments; use of passive samplers; and the added value of combined physical, chemical, and biological monitoring.
- The Navy will evaluate two types of carbon amendments that will be placed on two different half-acre plots. The plots will be characterized after placement of the carbon amendment to provide a baseline. One month after placement, physical monitoring will verify amendments were placed where expected. Physical, biological, and chemical measurements will be collected at 6-, 12-, and 24-month intervals after placement.
- The Draft Radiological FS Addendum and Draft Pilot Study Work Plan will be submitted to the agencies in June 2014 and a BCT working meeting will be scheduled. The Navy confirmed that the chemical sampling under the old piers was not completed as part of the rad data gaps investigation and the sampling will be collected as part of the pilot study investigation.

IV. IR-03 Pilot Study Update (Danielle Janda, Navy)

- The In Situ Solidification/Stabilization Design will be submitted to the BCT on April 30, 2014. The Navy is requesting a two-week BCT review of the document to accommodate field working starting on June 9, 2014.
- The Navy gave an update on the in-situ thermal remediation (ISTR) treatment system. As of April 2014, multi-phase extraction (MPE) wells 9 and 10 are dry and internal MPE locations are pumping at lower rates with greater drawdown. The overall system is pumping at a total rate of approximately 10,000-25,000 gallons per day. The Navy has turned off the exterior MPE points to attempt to flush water through the interior of the system.
- As of April 7, 2014, 1,400 gallons of NAPL have been extracted. MPE wells 8 through 11 will continue to be operated while the other perimeter MPE wells will be shut off. Additionally, reinjection will be reduced to 5,000 gallons per day and adjusted as necessary.
- Pressures within the system are low and pneumatic control is being maintained.
- The proposed shutdown criteria include recirculating at least one pore volume (150,000 gallons) through the system with no significant non-aqueous phase liquid (NAPL) accumulation (<50 gallons).

- The Navy gave an overview of the in situ stabilization/solidification (ISS) design. The baseline composite mixture consisted of a treatment zone composite made up of 30 percent Bay Mud, 18 percent bentonite slurry, and 20 percent cement. Adding organoclay did not improve the reduced leaching of the baseline composite mixture but adding activated carbon showed some (but not significant) improvement.
- The pilot study design includes five soil columns using the composite mixture extending to 48 feet below ground surface (bgs). The columns will be advanced using a 36-inch-diameter auger and each column will overlap the adjacent column by 6 inches.
- The BCT asked about aryl phosphates in the NAPL. The Navy responded that no aryl phosphates were detected in samples from within the treatment area.

V. Parcel E-2 Hot Spot Removal Action Update (Lara Urizar, Navy)

- The Navy is performing onsite biological observations of the mechanized and intrusive work as part of the remedial action pre-characterization effort. On April 8, 2014, a killdeer nest was discovered adjacent to the Panhandle intertidal zone. While the killdeer is not listed as a threatened or endangered species, it is protected under the U.S. Migratory Bird Treaty Act. The Navy has installed a 100-foot by 100-foot buffer around the nest which will remain in place until it is no longer needed.
- The Navy is collecting pre-excavation sidewall samples at a minimum frequency of one sample per 50 linear feet of the proposed excavation sidewall lengths and one sample for every 5 vertical feet of the proposed excavation sidewall depths. Floor samples are collected at either one sample per 400 square feet (Tiers 1, 2 adjacent to the landfill, and 4) or one sample per 900 square feet (Tiers 3, 5 and 2 in the Panhandle area) depending on which Tier the samples are collected in. 195 of the total 213 borings have been advanced as of April 21, 2014.
- The Navy is performing unexploded ordinance screening at all required sampling points.
- The Draft Characterization Technical Memorandum will be submitted to the BCT in July 2014 and the Draft Hot Spot Remedial Action Completion Report (RACR) will be submitted to the BCT in June 2015.

VI. Parcel B Total Petroleum Hydrocarbon (TPH) Corrective Action Update (Lara Urizar, Navy)

- In December 2013, 40 borings up to 40 feet bgs were advanced followed by 11 step-out borings advanced in February 2014.
- In December 2013, 13 pore water samples were collected and an additional 2 step-out pore water samples were collected in February 2014.
- Some of the general conclusions from the soil sampling include:
 - clean backfill has not been recontaminated by deeper contamination at the site

- polycyclic aromatic hydrocarbons (PAHs) are non-contiguous, limited in extent, and adequately delineated
 - TPH contamination is widespread and predominately present at 10-15 feet bgs, although it extends up to 18 feet bgs in limited areas.
 - TPH contamination is not bounded laterally to the southwest of the site.
- The pore water sampling results show TPH exceedances on the Bay side of the quay wall at IR24B102 and IR24B092. The Navy believes this is a limited source area that is not originating from landside of the quay wall.
- The Navy is planning to finish the revetment wall concurrently with removing TPH-contaminated soil. The Navy has collected geotechnical samples to support the shoring design for the excavations. The Navy will collect sidewall and bottom confirmation samples from inside the shoring; however, the revetment wall will need to be finished prior to receiving the confirmation sample results.
- The Draft Technical Memorandum will be submitted to the BCT in May 2014 and completion of the revetment wall is scheduled for fall of 2014.
- The Navy noted that the parcel boundary for Parcel B will be subdivided in order to facilitate conveyance of a portion of the property to City of San Francisco in FY15.

VII. Community Involvement Update (Melanie Kito, Navy)

- The Draft Community Involvement Plan was submitted to the BCT on March 31, 2014.
- The Navy participated in an Earth Day event at the Bayview Opera House on April 17, 2014.
- The Navy held a community meeting on April 23, 2014.
- The Navy developed the Parcel E-2 Remedial Design factsheet and Quarterly Progress Update that were distributed during the April community meeting.
- The next community event will be the bus tour on June 28, 2014. The Navy will develop print materials and the tour route and prepare advertising materials.

IX. Action Items/Future Meetings (Melanie Kito, Navy)

New Action Items:

- The Navy will send to the BCT Hamide Kayaci's new email address.
- The Navy RPMs will forward any regulatory agency document submittal emails from the month of April and going forward to Karla Brasaemle while the USEPA transitions to a new RPM.

- The Navy will follow up with DTSC regarding the presence of radiological contamination in the Building 211 Wooden Extension removal action.

Next Meetings:

- The May BCT meeting has been cancelled. The June BCT meeting will be held on June 5, 2014.

Meeting participants:

Karla Brasaemle, TechLaw

Amy Brownell, City of SF

Bill Dougherty, Tetra Tech ECI*

Jamie Egan, CH2M HILL

Catherine Haran, Navy

Mahbub Hussain, Navy*

Danielle Janda, Navy

Tracy Jue, CDPH*

Melanie Kito, Navy

Anthony Konzen, Navy*

Jackie Lane, USEPA*

Tina Low, Water Board

Leslie Lundgren, CH2M HILL

Dave Marks, Insight/CDM*

Ryan Miya, DTSC

Tamzen MacBeth, CDM*

Tim Mower, Tetra Tech EMI*

Reginald Paulding, Navy*

Christina Rain, Treadwell and Rollo/Langan

John Sourial, ERRG

Lara Urizar, Navy

Chris Yantos, Navy*

* Indicates attendee participated via telephone